Diet and the Environment

By G. Douglas Andersen, DC, DACBSP, CCN

On December 22, 1996, I watched a 16-minute piece on "60 Minutes" on hog farming in North Carolina. The story centered on how waste from 10 million pigs was contaminating the water supply. The locals were trying to find ways to prevent large companies from opening up more pig farms. After the segment concluded, I thought it was interesting that the most obvious solution of all was omitted. That is, cut demand (which in the case of pork has been skyrocketing due to the heavy promotion of bacon in many fast-food sandwiches).

Some Is Good ...

When we study anatomy, it is clear humans have evolved to consume both plant and animal products. Our GI tracts are shorter than animals that are complete vegetarians, but longer than animals that are total meat eaters. We have teeth designed for both meat and vegetables. Meat (including beef, pork, poultry, and fish) is loaded with high-quality protein and is an excellent source of many micronutrients including vitamin B12, iron, and selenium. Children raised with animal products in their diet are taller adults than kids brought up as total vegetarians.

More Is Not Better ...

Although man is capable of handling both animal and vegetable foods, science is demonstrating that humans were not designed to eat the quantities of animal foods we are now consuming. People who follow animal-based diets have a higher incidence of cancer, heart disease, stroke, and gastrointestinal disorders, such as constipation and diverticulosis. People who eat an animal-based diet also have higher blood pressure, higher cholesterol, and higher body fat.

Balance

Balance is what we DCs do and balance is the key to nutrition. As our nutrition knowledge continues to explode at an unheard of rate, it has become clear that no diet is optimal for everyone. There are, however, general trends and in the United States and many developed countries, overconsumption and undernutrition is a large problem. People in these cultures tend to consume too many calories from animal products and processed foods, and do not eat enough fresh fruits and vegetables.

A Public Health Service

As portal-of-entry health care professionals, DCs deliver care that in the acute stages tends to be visit intensive. Thus, we have more contact with our patients than other providers and are in a unique position to positively influence our patients in many areas of public health. By advocating a shift to a plant-based diet, DCs can not only help prevent and reduce serious disease, we can also protect our environment.

The Inefficiency of Eating Animals

Food Waste -- It takes 16 pounds of grain and soy to produce one pound of beef. It takes 12 calories of grain to produce one calorie of chicken. Forty percent of the world's and seventy percent of the grain produced in the United States is fed to livestock. One third of the world's marine catch is used for feed and fertilizer.

Water Waste -- It takes 2,500 gallons of water to produce one pound of beef. This is how much water an average family of four will use in a month! As the "60 Minutes" piece discussed, the tremendous amount of waste animals like pigs and cows produce puts a great burden on our already overburdened disposal system.

Air Waste -- Livestock contributes to air pollution. Again, in the "60 Minutes" piece, people who lived near the hog farms stated that the air smelled like rotten eggs. Scientists state that animals bred for slaughter contribute more than 30 million tons of methane gas a year to our atmosphere. This contributes to global warming.

Soil Waste -- The types of grains used to feed livestock, corn and soybeans, contribute to greater top soil erosion than any other crops. For every pound of meat, poultry, eggs, and milk we produce, we lose about five pounds of valuable top soil.

Energy Waste -- The cost of producing, transporting, and processing animal products is almost 10 times more than for vegetables.

Diet and Disease

We are in the midst of an information explosion when it comes to diet and disease, with information sometimes being contradictory or conflicting. The one overriding theme researchers continue to identify is that people who eat diets rich in fruits and vegetables have a lower incidence of many types of cancer including bladder, colon, esophageal, larynx, lung, mouth, and stomach. The risk of stroke reduces over 20% for every three servings of fruits and vegetables a person eats a day. Plant-based diets rich in fruits and vegetables are high in fiber, antioxidants, and phytochemicals (which preliminary research is showing are beneficial for a host of immune and physiological functions). These same diets tend to be lower in fats and especially saturated fat (the type that clogs arteries).

Ideas to Go Green

Buy one or more of the many fine vegetarian cookbooks in your local book store.

Eliminate animal products from sauces and stews.

Use animal products as a side dish as opposed to a main serving.

Try to have meatless days.

Aim to have vegetarian meals twice a day.

Attempt to eat animal products every other day.

Conclusion

By reducing our consumption of livestock we can have a profound affect on our health and our environment. People do not need to eat animal products two and three times a day. You can have your meat and eat it too: just keep your consumption moderate (three to seven servings per week). Going green means a cleaner environment and leaner, healthier bodies.

Average American Consumption of Animal Products in 1992 (pounds per year per person):

Beef: 64
Chicken: 49
Pork: 46
Fish: 16
Turkey: 15
Resources

The Wellness Encyclopedia. Houghton Mifflin Company. 1991.
Margen, Sheldon. Wellness Encyclopedia of Food and Nutrition. University of California at Berkeley, Health Letter Associates, 1992.
Lappe, Francis. Diet for a Small Planet. Ballantine Books, NY. 1982.
Nutrition Action Health Letter. October 1996.
Myers, Norman. Gaia: An Atlas of Planet Management. Anchor Press/Doubleday and Company, Inc., Garden City, NY. 1984.

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